

REMARKS

This application is amended to place the claims directed to the elected invention in condition for allowance. This amendment is fully responsive to the outstanding Official Action.

Claims 15 and 16 are amended. Support for the amendment may be found, for example, at specification page 7.

Claims 1-23 remain pending in the application, and claims 1-14 and 17-23 remain withdrawn from further consideration for being directed to non-elected inventions.

The Official Action objects to the specification for various informalities.

With respect to the "not allowed to grow" expression discussed at specification page 21, line 17, the expression is clear based on the context of page 21, lines 9-19, as well as the specification as a whole. For example, page 21 compares the ability of a strain to form colonies of a minimum size in the presence of cycloheximide using a time, temperature, and growth medium and concentration of cycloheximide at which particular IFO strains are "not allowed to grow". Thus, in this context "not allowed to grow" indicates these IFO strains do not form colonies of the minimum size of the cycloheximide resistant strain. Thus, the expression is clear.

As to the term "ones" at the specification page 22, lines 19-25, applicants respectfully submit that the meaning of "ones" is clear based on the context of the term. "The media in which a strain of the microorganisms of the invention is cultured in the process of producing  $\beta$ -glucan using the microorganisms of the invention include ordinary ones containing nutrients (including carbon sources, nitrogen sources, and inorganic salts) microorganisms belonging to the genus Aureobasidium can usually utilize." (Emphasis added to show to which term "ones" refers).

As to the word "defamers" on page 23, line 20, this is a typographical error, as evidenced by the context of the word "Where foaming occurs during cultivation, known defamers may be added to the medium appropriately." The specification has been amended accordingly, and no new matter has been added.

Regarding "wet volume" on page 24, this is a term known in the art, and this is not a typographical error.

As to the term "left" on page 63, line 28, based on the context, "left" is used as the past participle of "to leave".

Therefore, withdrawal of the rejection is respectfully requested.

Claim 15 is objected to for reciting "ITS" without including a definition in the specification or the claims. This objection is respectfully traversed.

Although Applicants believe that "ITS" is a term well known in the art, such as DNA or RNA, as evidenced by the number

of issued patents that recite ITS in the claims, the present specification is amended at page 6 to define "ITS" as Internal Transcribed Spacer.

Therefore, withdrawal of the objection is respectfully requested.

Claims 15 and 16 are rejected under 35 USC §101 for being directed to non-statutory subject matter. This rejection is respectfully traversed.

The position of the Official Action is that the claims are directed naturally occurring organisms.

However, claim 15 is amended to recite the isolated strain of *Aureobasidium pullulans* ADK-34 (FERM BP-8391) according to the specification, so as to distinguish the claimed invention from naturally occurring organisms.

Therefore, withdrawal of the rejection is respectfully requested.

Claims 15 and 16 are rejected under 35 USC §112, first paragraph, for not complying with the enablement requirement. This rejection is respectfully traversed.

The position of the Official Action is that the invention appears to be directed to a novel strain of *Aureobasidium pullulans* ADK-34 (FERM BP-8391), and requires that a deposit be made for patent purposes.

The Examiner's attention is respectfully directed to the Declaration of Availability and Maintenance of Microorganism

included in the appendix of this amendment. Withdrawal of the rejection is respectfully requested.

Claims 15 and 16 are rejected under 35 USC §112, first paragraph, for not complying with the written description requirement. This rejection is respectfully traversed.

The claims are directed to isolated strain of *Aureobasidium pullulans* ADK-34 (FERM BP-8391) of which the ITS-5.8S rRNA gene contains the sequence of 563 bases shown in Sequence Listing, SEQ ID No. 2 or a base sequence molecular-phylogenetically equivalent thereto based on the ITS-5.8S rRNA gene base sequence and which is capable of secreting and producing  $\beta$ -glucan out of fungi. Thus, the strain structure and function are described in the claim and the present specification, e.g., the paragraph beginning at line 19 of page 6, with sufficient detail that one skilled in the art would conclude that applicants invented the claimed invention.

Therefore, withdrawal of the rejection is respectfully requested.

Claims 15 and 16 are rejected under 35 USC §112, second paragraph, for being indefinite. This rejection is respectfully traversed.

The position of the Official Action is that the phrase "a microorganism...secreting and producing  $\beta$ -glucan out of fungi" is indefinite because the expression "out of fungi" is unclear. However, the result of "secreting and producing  $\beta$ -glucan out of

fungi" would have been understood by, for example, the explanation from page 22, line 8 to page 25, line 4. Moreover, one would have understood that this expression refers to the function of a sequence the equivalent the ITS-5.8S rRNA gene containing SEQ ID No. 2.

However, for the clarification "out of fungi" is removed from claim 15.

The Official Action also believes the statement "or a base sequence...equivalent thereto" is indefinite. However, "or a base sequence molecular-phylogenetically equivalent thereto based on the ITS-5.8S rRNA gene base sequence and which is capable of secreting and producing  $\beta$ -glucan" helps to describe a sequence different from but functionally equivalent to the ITS-5.8S rRNA gene containing SEQ ID No. 2.

The Official Action also states that resistance to cycloheximide is not defined by the present specification because the resistance reference is not defined in the present specification. However, the specification at page 21 describes resistance in definite manner, i.e., in terms of a reference to particular strains, and minimum level of cycloheximide that usually prevents the growth of the reference strains in for a minimum colony size for a particular time, temperature, and growth medium:

The expression "resistant to cycloheximide" as used herein shall mean "exhibiting resistance to cycloheximide compared with reference strains, IFO-4466, IFO-6353, and IFO-7757". This is the case that the formation of a colony of 0.1 mm or greater, preferably 0.3 mm or

greater, still preferably 0.5 mm or greater in diameter as a result of fungous proliferation is observed on a solid medium having the cycloheximide concentration that IFO strains is not allowed to grow after a strain is inoculated on the solid medium (agar plate) containing cycloheximide and cultured at 26°C for 10 days. Usually, these IFO strains are not allowed to grow on a solid medium containing cycloheximide at concentrations of 20 µg/ml or higher.

Therefore, as the claims are definite for the reasons discussed above, withdrawal of the rejection is respectfully requested.

Claims 15 and 16 are rejected under 35 USC §102(b) as being anticipated by or, in the alternative, under 35 USC §103(a) as being obvious over YURLOVA. This rejection is respectfully traversed.

The position of the Official Action is that YURLOVA discloses a composition comprising *Aureobasidium pullulans* that appears to be identical to the claimed invention.

However, YURLOVA fails to disclose or suggest an isolated strain of *Aureobasidium pullulans* ADK-34 (FERM BP-8391) as recited in claims 15 and 16.

Therefore, YURLOVA cannot anticipate nor render obvious the claimed invention, and withdrawal of the rejection is respectfully requested.

Claims 15 and 16 are rejected under 35 USC §102(b) as being anticipated by or, in the alternative, under 35 USC §103(a) as being obvious over NAVARINI or MISAKI. This rejection is respectfully traversed.

The position of the Official Action is that NAVARINI or MISAKI disclose compositions comprising *Aureobasidium pullulans* that appear to be identical to the claimed invention.

However, NAVARINI and MISAKI fail to disclose or suggest an isolated strain of *Aureobasidium pullulans* ADK-34 (FERM BP-8391) as recited in claims 15 and 16.

Therefore, these publications cannot anticipate nor render obvious the claimed invention, and withdrawal of the rejection is respectfully requested.

In view of the amendment to the claims and the foregoing remarks, the elected invention of the present application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

- Declaration of Availability and Maintenance Of Microorganism